Health information on the Internet

Gold mine or minefield?

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The Internet has revolutionized the way information is shared and accessed. Information retrieval is easier now than ever before. Since the rise of modern search engines, social networks, and ubiquitous access through devices such as smartphones and tablet or laptop computers, information is available at people's fingertips almost any time of the day. As of 2010, 80% of Canadian households were connected to the Internet.[1]

One important domain in which the Internet plays an increasing role is health information access. Seventy percent of Canadians go online to search for medical or health-related information,[2] and it has been reported that the Internet, rather than physicians, is the first source of information for many people.[3] Considering how easy it is to Google search "bad cough," it is not surprising that many people make an attempt at self-diagnosis using the Internet before waiting hours in crowded walk-in clinics or emergency departments to consult professionals. The flow of information has fundamentally changed, and physicians have less control over health information relayed to patients. Not surprisingly, this paradigm shift has elicited varied and sometimes conflicting views about the value of the Internet as a tool to improve health care.

Tag the good and bad

Online health information can increase patients' knowledge of, competence with, and engagement in health decision-making strategies.[4] Independent online inquiries can complement and be used in synergy with doctor-patient interactions in the clinic, which often become highly time constrained. Patients now have the ability to find answers for additional or forgotten questions, as well as the opportunity to explore sensitive or embarrassing questions in the comfort and privacy of their own homes. Furthermore, through emerging patient-centred websites, blogs, and support communities, patients can share their personal health and illness experiences; they can offer special insights and reflections from the lived experiences of their specific health conditions, which physicians might not be able to provide. This type of information might help patients to become better informed about their illness, and also reduce feelings of loneliness and isolation. This becomes especially beneficial for those patients who are immobile and homebound as a result of debilitating illness.[5,6]

Online health information also presents some inherent difficulties. Online health information is difficult to regulate, meaning quality control is a challenge, and, further, patients vary widely in their health information literacy. Bad health information used in an improper way can be highly detrimental. Patients might trust misleading information or might make important health decisions based on sensationalized or emotionally charged stories that are not relevant to their health context.[7,8] The Internet can also be used as a platform for the promotion of esoteric and unscientifically founded health practices. Patients are often in a vulnerable position, and many are willing to accept information that provides a sense of hope and control. Owing to a lack of technical knowledge, some patients are also unable to critically assess or might misinterpret health information. These factors can lead to a false sense of knowledge and security, and potentially noncompliance if the patient adopts beliefs that conflict with appropriate medical practices. While the traditional role of the physician as the custodian and provider of health information might have contributed to the paternalistic nature of the traditional doctor-patient relationship, it also allowed physicians, under ideal circumstances, to ensure that each patient received medically valid information tailored to his or her level of understanding.

Trustworthy networks

Research shows that physicians' espouse somewhat ambivalent, "moderately positive" views toward patient Internet use for health information.[9] Doctors recognize that Internet use allows them to explain complicated health issues more easily, and they believe Internet use has the potential to improve patient outcomes. On the contrary, physicians are also concerned about patients developing unnecessary fears about their health, observing that patients often come with irrelevant and inaccurate information. Because of this, doctors are worried about Internet use exacerbating health care costs through nonessential referrals or treatments.[10] Despite such concerns, most physicians said they had little difficulty addressing information that was accessed by their patients and believed that they were competent when it came to clarifying patients' misguided or inaccurate information. One issue that remained among many physicians was the difficulty in suggesting up-to-date and trustworthy resources on the Internet. Physicians expressed the need to be trained in Internet use as it relates to patient

health information so that they would be aware of which websites to recommend for patient use.[9]

Despite the notion that people are passive recipients of health information on the Internet, regardless of its claim or source, many patients are also wary of the information they find online. Patients are often unsure about which websites to trust and are concerned about accessing potentially misleading or illegitimate health information on the Internet.[11] For this reason, individuals often triangulate their sources in order to confirm facts or health suggestions.[12] However, when it comes to confirming online health-related information with their physicians, many patients are hesitant. Some patients are afraid their doctors might perceive it as a challenge to their expertise and authority,[9] highlighting the need for open dialogue between doctors and patients about online health information and appropriate resources.

Stay connected

Physicians will be increasingly faced with patients who have retrieved online health information. As the largest group of Internet users continues to age and develops a greater need for health services, diagnostics, and treatments, physicians must be prepared for the Internet to play a key role in health care delivery. Whether or not physicians believe medical professionals should remain the sole protectors and regulators of health information, it is important that they are mindful of how the Internet is being used among their patients. Patients are no longer influenced only by their physicians' health advice and recommendations. Online health information offers alternative options, insights, and a broader knowledge base for patients. Health care workers are entering a new world of medicine wherein they must be responsible for information deliberation and dialogue with their patients.

Furthermore, there is also an onus on physicians, other health care workers, and researchers to ensure that legitimate and trustworthy online health care resources exist for patient use. This information should be available in a user-friendly, comprehensible, and accessible format. This can be achieved through the development of valid evidence-based Web resources that are presented in "patient-friendly" formats. However, simply developing websites is not enough; it will be necessary to inform physicians about current, up-to-date, and valid health resources that they can suggest to their patients.

There is currently an opportunity to turn an online minefield of health facts, figures, and stories into a gold mine of information, which could potentially have a considerable effect on the improvement of patient health. Going beyond the traditional paternalistic doctor-patient relationship model, effective use of online health information has the potential to enhance the patient-physician health partnership. This will require open discussion between doctors and patients about online health information and information-access practices, as well as the development of appropriate online resources for patients that are designed by qualified professionals. 🍁

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